

*The Ice Diaries* – the inside story of the trip to the North Pole by USS *Nautilus* in August 1958, by Captain William R. Anderson, her skipper for that voyage, and award-winning and best-selling author Don Keith – to be published in July 2008 by Thomas Nelson.

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## FACT SHEET – USS NAUTILUS AND VOYAGE TO NORTH POLE, AUGUST 1958

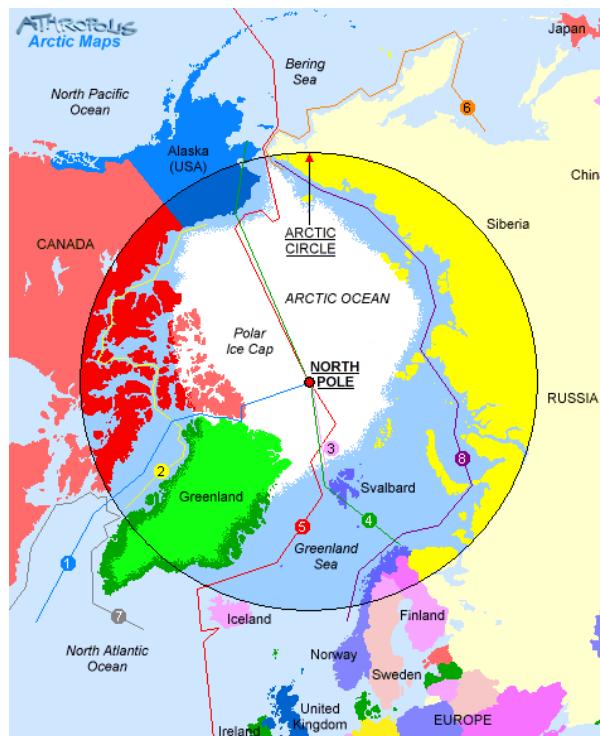
### THE NORTH POLE TRIP



- ✚ In response to the launch of Sputnik by the Russians, President Dwight Eisenhower ordered USS *Nautilus* (under the command of then-Commander William R. Anderson) to attempt an under-ice voyage from Pacific to Atlantic via the North Pole.
- ✚ The North Pole mission was dubbed “Operation Sunshine.”
- ✚ *Nautilus* made THREE excursions beneath the polar ice pack:
  - Summer 1957 (North Pole was NOT the objective) that almost ended disastrously when a surface attempt hit ice and damaged both periscopes. A miraculous at-sea repair job in an Arctic gale

enable the submarine to continue under-ice exploration and still show up for a major NATO exercise in the North Atlantic.

- June 1958 – headed for the North Pole but was forced to turn back by heavy ice in the Chukchi Sea that created dangerous “squeeze” problem and a near tragic collision with an ice keel. They went to Pearl Harbor to await approval to try later in the summer when better ice conditions and more knowledge of them would allow a second attempt.
- August 1958 – successfully made the voyage from Pacific to Atlantic, via the North Pole



- ✚ *Nautilus* reached North Pole at 11:15 PM Eastern time, August 3, 1958
- ✚ 116 men were aboard for the Polar trip – including 5 civilian scientists and navigational technicians
- ✚ The mission was one of the most secret ever attempted – less than twenty people outside the hull of *Nautilus* knew of the voyage.

- ✚ Ice keels (huge shafts of ice) project downward over 100 feet. In some spots, the seas in the area are about 100 feet deep. *Nautilus* was 52 feet tall. That creates a huge “squeeze” problem for a vessel like *Nautilus*.
- ✚ *Nautilus* used unproven ice-detection equipment and prototype compasses, dramatically raising the danger of the mission. The North Pole offers great challenges to navigation because of its high latitude and distance from the Magnetic North Pole.
- ✚ At the moment when *Nautilus* became the first vessel in history to reach the North Pole, her skipper, Captain William R. Anderson, said, “For the U.S.A. and the U.S. Navy—the North Pole!”
- ✚ When *Nautilus* emerged from beneath the ice pack, she sent by radio the message, “*Nautilus* 90 North,” to President Eisenhower to let him know of the success of the mission.
- ✚ The transit from Hawaii to near Greenland took about two weeks, with about 1,600 miles of the trip being beneath the treacherous ice pack.

### POST-TRIP REACTION



- ✚ Captain Anderson was immediately brought back to Washington DC for a big press conference at the White House. The story of the North Pole transit was front-page news worldwide.
- ✚ At the press conference, President Eisenhower awarded *Nautilus* the Presidential Unit Citation, the first time it was given in peacetime.



- ✚ Captain Anderson was also awarded the Legion of Merit by the president at that news conference.



- ✚ The crew of *Nautilus* received heroes' welcome when she made her first port call at Portland, Great Britain.
- ✚ Captain Anderson was interviewed by hundreds of journalists, including John Cameron Swayze and David Brinkley, and he and his ship were featured twice on news programs hosted by Edward R. Murrow.
- ✚ Anderson and the crew were treated to a tickertape parade through Manhattan's "Canyon of Heroes" and honored at a special ceremony at New York City Hall.
- ✚ In 2000, the North Pole trip by *Nautilus* was named "one of mankind's greatest adventures" by Time Books.

✚ The primary accomplishments of the North Pole transit were:

- Proved the capability of U.S. nuclear submarines to work beneath the polar ice pack, in territory near the Soviet Union. The ability to operate nuclear-missile submarines beneath the cover of the ice pack gave the U.S. a tremendous deterrent during the tensest days of the Cold War.
- Was the first transit through the long-sought Northwest Passage, a route that had eluded explorers for centuries.
- Gave future missions a staggering amount of new knowledge about that previously unexplored region of the planet.
- Showed an alternate route for submarines so they could be quickly and stealthily be re-deployed from one hemisphere to another. With the cost of construction of nuclear vessels and the bottleneck and exposure risk of the Panama Canal, this greatly increased logistical options for the U.S. Navy.
- While reaching the North Pole was what captured the imagination of the world, the true value of the transit was proving the capability of traveling from one great ocean to the other, under the cover of the Polar ice pack.

### **FACTS ABOUT USS *NAUTILUS***



✚ Conceived and designed by Admiral Hyman Rickover and his staff at the Naval Reactor Bureau in Washington DC. Able to shrink a nuclear reactor down from the size of a city block to about the size of a walk-in closet.

- ✚ Built at Electric Boat Company in New London, CT, after President Harry Truman dedicated her and signed her keel.
- ✚ Launched January 21, 1954, with First Lady Mamie Eisenhower as the ship's sponsor.



- ✚ Commissioned September 30, 1954, as the world's first nuclear-powered vessel.
- ✚ First skipper was Commander Eugene Wilkinson, who acknowledged the historic message from his crew, "Underway on nuclear power," January 17, 1955.
- ✚ Dimensions and capabilities:
  - Length: 320 feet
  - Beam width: 28 feet
  - Height (from top of sail to keel): 52 feet
  - Maximum dive depth: 713 feet
  - Maximum speed: better than 23 knots 26.5 mph), surfaced or submerged
  - Time she could stay submerged: virtually unlimited



- ✚ Decommissioned March 3, 1980, after 25 years of service.
- ✚ Became a museum ship and designated as Historic Ship *Nautilus* in 1985. She is only one of two ships so designated, with the other being the USS Constitution ("Old Ironsides") in Boston.
- ✚ Now berthed and open to the public adjacent to the Submarine Force Museum and Library on the Thames River in Groton, CT, not far from where she was constructed, dedicated, and commissioned.





## NORTH POLE FACTS

- ✚ The North Pole is located at 90 degrees north latitude, the northernmost point on planet Earth.
- ✚ Though once thought to be located on a land mass, the North Pole is actually in the middle of the Arctic Ocean. The nearest land is the coast of Greenland, 440 miles away.
- ✚ The ocean depth at the Pole is about 14,000 feet, as first confirmed by *Nautilus* on her historic trip.



- ✚ The Arctic Ocean is typically covered by the ice pack within hundreds of miles of the North Pole, but there are predictions that the warming of the planet may soon make the area ice free during summers.



- ✚ Expeditions led by Frederick Cook (1908) and Robert Peary (1909) claimed to have reached the North Pole by traveling by dogsled over the ice, but those claims are not widely accepted as fact.
- ✚ The first aerial flights over the Pole took place in 1926.
- ✚ A Russian airplane landed at the Pole in 1948, the first documented occurrence of men setting foot on the ice there.
- ✚ *Nautilus* reached the Pole in August 1958, followed nine days later by sister nuclear submarine USS *Skate*. *Skate* surfaced at the Pole (the first time that happened) in March 1959.
- ✚ A British expedition became the first men to reach the North Pole on foot on April 6, 1969.
- ✚ Winter temperatures at the North Pole average -30 degrees Fahrenheit. Summer temperatures average near freezing (32 degrees).
- ✚ Under international law, no country currently owns the North Pole or the region of the Arctic Ocean surrounding it. The five surrounding Arctic states, Russia, the United States (via Alaska), Canada, Norway and Denmark (via Greenland), are limited to a 200-mile economic zone around their coasts.
- ✚ The ice in the polar pack has roughly the same constituency as a poor grade of set-up concrete.
- ✚ Surfacing opportunities for a submarine are offered by leads and polynyas. Leads are like “rivers” between the floes and polynyas are “ponds” in the ice pack.
- ✚ Nuclear submarines that followed *Nautilus* were better designed to surface amid the ice, with much stronger sails and with their antennas and periscopes better protected.

